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| Applicant: ADCOCK, John, Warwick et al | |

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AU 97/00548

RECEIVED 10 MAR 1998

3

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388 Rec'd PCT/TTO 26 FEB 1999

an overall system that communicates and automatically manages all the information needed for a complete business transaction cycle. The cycle includes the initiation of a business transaction by a user, transfer of funds from a user's account to a trader's account, management of electronic warehousing, initiation of the delivery 5 of the goods and/or services purchased by the user, and other activities that can be achieved automatically once the information is available in electronic form. An alternative to transferring funds within the initiation of the business transaction is to reserve funds for transfer from the user to the trader on a timed basis, or in installments or upon acceptance of delivery of the goods and/or services by the 10 user.

Accordingly, the present invention provides a system for automatically conducting a business transaction between a user and a trader including:

- a trader terminal including billing information representative of said trader;
a user terminal, or user card associated with a user terminal;
- 15 a local communications link provided between said user terminal or said user card and said trader terminal;
wherein an order for goods and/or services of the trader is initiated by transmitting data over said link using a message protocol from said user terminal to be received by said trader terminal;
- 20 said user terminal, or said user card receiving and processing user information representative, of said user, and for receiving and processing said billing information via said link in response to said order; and
a communications network enabling said user terminal to communicate with a service provider, wherein said user terminal transmits said billing information and 25 said user information to said service provider over said communications network, whereupon said service provider automatically transfers funds of said user to said trader under the authorization of said user to effect a financial transaction between said user and said trader.

CT/AU 97 / 00548

RECEIVED 16 MAR 1998

4

The order may be automatically transmitted when said user terminal is within the proximity of said trader terminal.

The user terminal or user card may receive said billing information through said local communication's link when said user terminal or said user card is in the 5 vicinity of said trader terminal or is linked to said trader terminal.

Reserve funds of said user may be made available to transfer to said trader either partially or in full for goods and/or services purchased by said user. The reserve funds may be transferred on the basis of the amount of use or length of use of the goods and/or services.

10 The service provider may transmit a message to said trader terminal indicating the completion of all or part of the financial transaction.

The user terminal may transmit delivery point information associated with goods and/or services purchased by the user through the business transaction to the service provider together with said billing information and said user information.

15 The user information may be pre-stored on said user card or integrated into said user terminal. The user card may be adapted to be inserted into said user terminal. The delivery point information may be pre-stored on said user card, integrated into the user terminal, or added by the user by means of a keyboard/keypad on request by an indicator on said user terminal.

20 The user terminal may include a communications terminal adapted to interact with the trader terminal through data acquisition means such as detector means, of said user terminal for sensing the trader billing information and a computing processor integrated with the communications terminal.

CT/AU 97 / 00548

RECEIVED 16 MAR 1998

5

The user may authorise a transaction by entry of a PIN on the user terminal.

On completion of the transfer of funds from the user to the trader, information identifying the goods and/or services of the trader purchased by the user and said delivery point information may be automatically transferred to an electronic

- 5 warehouse, or the like, to allocate the goods and/or services. Alternatively, the reserve funds of said user may be transferred to said trader upon acceptance by said user of delivery of said goods and/or services.

After allocation of the goods and/or services has taken place, delivery of the goods and/or services may be initiated, on the basis of said delivery point information.

- 10 Where implemented, reserve funds of said user may be transferred to said trader upon delivery or acceptance by said user of the goods and/or services.

The present invention also provides for a method of automatically conducting a business transaction between a user and a trader, said method comprising the steps of:

- 15 - providing a local communications link between a user terminal and a trader terminal;
- transmitting over said link an order by said user for goods and/or services of said trader using said user terminal;
- receiving said order at said trader terminal;
- 20 - wherein said order is transmitted and received using a messaging protocol;
- receiving by said user terminal, or by a user card associated with a user terminal, trader billing information representative of said trader from said trader terminal via said link;
- processing on said user terminal or said user card said trader billing information and user information representative of said user,
- 25 - transmitting said trader billing information and said user information to a service provider over a communications network, and

POH-AU 97 / 00548

RECEIVED 16 MAR 1998

6

- automatically transferring funds of said user to said trader via the service provider under the authorization of said user to effect a financial transaction between said user and said trader.

- 5 The step of transmitting an order may include automatically transmitting said order when said user terminal is within the proximity of said trader terminal.

The receiving by said user terminal step may include receiving said trader billing information through said local communications link when said user terminal or said user card is in the vicinity of said trader terminal or is linked to said trader terminal.

- 10 The step of automatically transferring funds may include transferring reserve funds either partially or in full for goods and/or services purchased by the user. The reserve funds may be transferred on the basis of amount of use or length of use of the goods and/or services or upon delivery or acceptance by the user of the goods and/or services.

- 15 The method may further include the step of transmitting delivery point information associated with goods and/or services purchased by the user through the business transaction to the service provider together with said trader billing information and said user information.

- 20 The method may further include the step of automatically transmitting a message to the trader terminal indicating completion of all or part of the financial transaction to the trader.

The method may further include the step of automatically transmitting information identifying the goods or services of the trader purchased by the user and the delivery point information to an electronic warehouse, or the like, so as to allocate

PCT/AU 97 / 00548

RECEIVED 16 MAR 1999

7

the goods or services.

The method may include a further step of initiating delivery of the goods or services on the basis of said delivery point information.

5 Preferably, the user authorises the financial transaction by entry of a PIN on the user terminal.

A preferred embodiment of the invention is hereinafter described, by way of example only, with reference to the accompanying drawings wherein:

Figure 1 shows a system for automatically conducting a business transaction between a user and a trader in accordance with the present invention;

10 Figure 2 shows processes involved according to a first embodiment of the system of Figure 1;

Figure 3 shows processes involved according to a second embodiment of the system of Figure 1; and

15 Figure 4 shows processes involved according to a third embodiment of the system of Figure 1.

Figure 1 shows a system 50 that comprises a user terminal 100 in communication with a trader terminal 170 through local communication link 300. The trader's billing information 200, which can include charging information, is stored at the trader terminal 170. To implement a business transaction on a user's behalf, the 20 user enters a command or order for goods and/or services of a trader on the user terminal 100 or alternatively the user terminal 100 senses the presence of the trader terminal 170 requesting a demand for payment for goods and/or services by the

PC 97 / 00548

RECEIVED 15 MAR 1993

7a

trader terminal 170 over the link 300 through the trader billing information 200. The information identifying a trader, contained in billing information 200, and into which account of the trader 700 funds will be transferred, is transmitted to the user terminal 100 over link 300. The user terminal 100 then retrieves information 5 identifying the user's account 600 from which funds will be withdrawn, and forwards both sets of information, that is user information and trader billing information, to a service provider 500 over the communications network 400 whereby funds are transferred from the user account 600 to the trader account 700. The transfer of funds is approved by the user on entry of a PIN on the user 10 terminal 100. The user terminal 100 may be used to add other information, such as delivery point information specifying the point of delivery for the goods and/or services purchased from the trader by the user. Confirmation of an order for goods and/or services by a user may be performed by entry of a key, code or PIN on the user terminal 100, not being the PIN associated with the approval of transfer of 15 funds.

The delivery point information is then transmitted over communications network 400 to the service provider 500. On completion of the financial transaction, the delivery point information and approval for delivery is then transmitted by service provider 500 to an electronic warehouse 900, or the like, over communications link 20 750. Information from the trader terminal 170, specifying the goods and/or services purchased by the user is forwarded at any time during the process to the electronic warehouse 900 which then reads that information to allocate or obtain the goods or services ready for delivery to the user at 950.

Funds of a customer may be reserved for payment to a trader so that the transfer 25 of funds need not take place immediately following the completion of the transaction. Funds may be transferred from the user account 600 to the trader account 700 progressively with time or upon the completion of an event, for example, when goods and/or services of the trader are available following an order.

PCB 97 / 00548

RECEIVED 16 MAR 1999

7b

for the same by the user. The funds could be transferred partially, by way of installments, or fully. Each installment may be under the control of the trader billing information 200. For example a

PC 97 / 00548

RECEIVED 16 MAR 1998

11

information and trader account details. The data acquisition system 190 may alternatively be an ultrasonic detector, radio frequency detector or magneto-inductive detector depending on the communications used in the local link 300.

The communications link 300 is the means by which the user's telephone of the user terminal 100 is provided with the identity of the trader, the identity of the trader's banking account to which payment is effected and sufficient data related to the trader's billing system to include the dollar amount of the goods and/or services and what the goods and/or services relate to, together with other information which may be necessary for the conduct of the transaction such as ordering of the goods and/or services. The local link 300 is duplex in that it allows two-way communication on different channels. On one channel, the trader's data will be transmitted to the user's phone and the reverse channel is used for confirmation to the trader that a transaction has been completed and for other handshaking protocols including the ordering of the goods and/or services concerned. The duplex communications link may be any one of several types of link including, but not limited to, modulated infra-red, magneto-inductive loop, modulated ultrasonic and radio frequency in each direction, or in any combination. The detector 190 located in the user terminal 100 will accordingly be of a type corresponding to the data transmission type and methodology used on the local link 300.

Once the trader's details have been received by the user terminal 100, details of the user's account from which funds will be withdrawn are read from the card 800 of the user by the card reader 150. Information detailing the delivery point of the goods or services purchased may be entered by the user through terminal 100 for transmission to the service provider 500.

The user's phone subsequently calls or dials automatically the service provider 500, such as a banking system, over the communications network 400 whereby a

PAU 97 / 00548

RECEIVED 16 MAR 1998

11a

conventional EFTPOS link is established. The service provider 500 has access to each of the user's account 600 and the trader's account 700. The user is informed of the processes being conducted by data appearing on the display facility of the

PCIAU 97 / 00548

18

required to determine all the billing information to complete the transaction.

Alternatively, a trader's card, containing the billing information and located at each terminal, may be sensed by either detector 190 or card reader 150 of user terminal 100 at various points along the motorway etc. to complete the transaction.

5 A second example of how system 50 may be implemented is discussed with reference to Figure 3. In a similar fashion to the previous example, goods or services of a trader may be advertised on a pay-television channel in an interactive pay-television application. The set-top unit (STU) associated with a user's subscription, or alternatively coded information appearing on the TV screen, may
10 be used to provide the trader billing information including account and identification details.

In the case of the STU, various codes associated with each trader may be pre-programmed into the STU. A user terminal 100, akin to a remote control unit, has a detector 190 for sensing and receiving the trader billing information. When a
15 user wishes to purchase goods or services advertised at step 310, the user terminal 100 is directed to sense the information from the trader over a local link 300 at step 312 and the trader billing information is stored in the user terminal 100, where user information is also stored. The cost of the product is displayed on terminal 100 or on the user's television screen at step 314. The user may use the user terminal 100
20 to order goods and/or services from the trader and confirm such order by entering a code or PIN on the user terminal 100, this code or PIN not being the PIN associated with authorising the transfer of funds from the user account to the trader account. Funds may then be transferred at a later time. At step 316, the information relating to trader billing and to the user is processed and then at step
25 318 transmitted through an interface 210 on the terminal 100, over link 400 to a service provider 500. Alternatively, a user card 800 may store and process the

R03S7 / 00346

RECEIVED 16 MAR 1998

18a

trader information and user information, have it read by card reader 150 and subsequently automatically transmitted to the service provider. At step 320, the service provider 500 retrieves the trader account details 700 and user account details 600. At step 324 the service provider 500 verifies that the user account has enough funds to cover the transaction, then at step 326 the transaction details are displayed for the user to authorise the transaction by entry of a PIN at step 328. The funds are then

PCT/AU97/00548

RECEIVED 16 MAR 1998

21

CLAIMS:

1. A system for automatically conducting a business transaction between a user and a trader including:
 - 5 a trader terminal including billing information representative of said trader;
 - a user terminal or user card associated with a user terminal;
 - a local communications link provided between said user terminal or said user card and said trader terminal;

wherein an order for goods and/or services of the trader is initiated by transmitting data over said link, using a message protocol, from said user terminal 10 to be received by said trader terminal;

said user terminal or said user card receiving and processing user information representative of said user, and for receiving and processing said billing information via said link in response to said order, a communications network enabling said user terminal to communicate with a service provider, wherein said user terminal 15 transmits said billing information and said user information to said service provider over said communications network, whereupon said service provider automatically transfers funds of said user to said trader under the authorization of said user to effect a financial transaction between said user and said trader.
2. A system according to claim 1 wherein said order is automatically transmitted when said user terminal is within the proximity of said trader terminal. 20
3. A system according to claim 1 or claim 2 wherein said user terminal or said user card receives said billing information from said trader terminal through said local communications link when said user terminal or said user card is in the vicinity of said trader terminal.
- 25 4. A system according to claim 1 or claim 2 wherein said user terminal or said user card receives said billing information from said trader terminal through said

PCT/AU 97/00548

RECEIVED 16 MAR 1998

22

local communications link when said user terminal or said user card is linked to said trader terminal.

5. A system according to any one of claims 1 to 4 wherein said financial transaction is authorised by said user upon entry of a PIN on said user terminal.

5 6. A system according to any one of the previous claims wherein prior to any transfer of funds confirmation of said order is entered on said user terminal by said user.

7. A system according to any one of the previous claims wherein funds of said user are reserved for transfer to said trader, the reserved funds being transferred 10 either partially or in full according to certain criteria relating to goods and/or services purchased by said user.

8. A system according to claim 7 wherein said certain criteria includes any one of amount of use of said goods and/or services, duration of use of said goods and/or services.

15 9. A system according to claim 7 or claim 8 wherein the partial transfer of reserved funds are transferred in installments and the amount of each installment is controlled in accordance with said billing information.

10. A system according to any one of the previous claims wherein delivery destination information for goods and/or services purchased by said user is 20 transmitted to said service provider, together with said billing information and said user information.

11. A system according to claim 10 wherein, information identifying said goods and/or services purchased by said user are transmitted, together with said delivery

PCTAO 97 / 00548

RECEIVED 16 MAR 1992

23

destination information, to an electronic warehouse, or the like.

12. A system according to claim 11 wherein said electronic warehouse allocates said goods and/or services on the basis of said information identifying said goods and/or services purchased by said user, and initiates delivery of said goods and/or services on the basis of said delivery destination information for collection by said user.
13. A system according to claim 12 wherein the transfer of funds, including reserved funds, of said user to said trader takes place upon completion of delivery, or acceptance by said user, of said goods and/or services.
- 10 14. A system according to any one of the previous claims wherein said billing information is incorporated into a trader card at said trader terminal.
- 15 16. A system according to any one of the previous claims wherein said user terminal has data acquisition means, such as detector means, for sensing and receiving said trader billing information at said trader terminal.
- 15 16. A system according to any one of the previous claims wherein said user terminal stores said user information, said user information including user identification and an account of said user from which funds are transferred.
17. A system according to claim 16 wherein said user terminal has computing processor means for processing said billing information and said user information.
- 20 18. A system according to any one of claims 10 to 17 wherein said user terminal stores said delivery destination information, or said delivery destination information is input by said user when prompted by said user terminal.

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RECEIVED 16 MAR 1998

24

19. A system according to any one of the previous claims wherein said user terminal has interface means adapted to transmit any or all of said billing information, said user information, information identifying goods and/or services purchased by said user and delivery destination information to said service provider over said communications network.
- 5
20. A system according to any one of claims 12 to 19 wherein confirmation messages of completion of all or part of the financial transaction are transmitted by said service provider and confirmation of delivery of goods and/or services is transmitted by said electronic warehouse, to said trader and said user.
- 10 21. A system according to any one of the previous claims wherein said user terminal is adapted to receive said user card, said user card being unique to a particular user.
- 15 22. A system according to claim 21 wherein said user card pre-stores said user information, said user information including user identification and an account of said user from which funds are transferred.
23. A system according to claim 21 or claim 22 wherein said user card has data acquisition means incorporated therein, such as detector means, for sensing and receiving said billing information at said trader terminal.
24. A system according to any one of claims 21 to 23 wherein said user card has computing processor means for processing said billing information and said user information.
- 20
25. A system according to any one of claims 21 to 24 wherein said user card pre-stores delivery destination information.

PCT/A 7100548

RECEIVED 16 MAR 1998

25

26. A system according to claim 24 or claim 25 wherein said user terminal has reader means for reading any one or all of said billing information, said user information and delivery destination information.
27. A system according to any one of the previous claims wherein the user is informed, through the user terminal, of all processes being conducted in respect of the business transaction.
28. A system according to any one of the previous claims, wherein said transaction is reversible such that a partial or full refund to the user from the trader for said goods and/or services takes place and is initiated by said trader on the basis of certain criteria, such as quality control.
29. A system according to claim 28 wherein said transaction is reversed by accessing a database of said service provider through a communications system operating between said trader and said service provider.
30. A system according to claim 29 wherein said database stores information relating to each transaction by an identification code.
31. A system according to any one of the previous claims, wherein said trader has access to an account of said trader into which funds are transferred, through said service provider, so as to verify transaction details in said account of said trader.
32. A system according to any one of the previous claims wherein said user terminal has access to an account of said user to verify that sufficient funds are available for said transaction.
33. A system according to any one of the previous claims, including goods

PCT 97/00548

RECEIVED 16 MAR 1998

26

and/or services having associated taxes/imposts applied by a legislative body, wherein the transfer of funds of said user includes said service provider transferring the associated amount of taxes/imposts to the legislative body.

34. A system according to any one of claims 28 to 30 including goods and/or services have associated taxes/imposts applied by a legislative body, and in a reversible transaction, wherein the amount of taxes/imposts previously transferred to the legislative body is transferred to said user.
35. A system according to any one of the previous claims, wherein the user terminal is incorporated in said trader terminal and said user information is incorporated in either said user terminal or said user card.
36. A method of automatically conducting a business transaction between a user and a trader, said method comprising the steps of:
providing a local communication link between a user terminal and a trader terminal;
transmitting over said link an order by said user for goods and/or services of said trader using said user terminal;
receiving said order at said trader terminal;
wherein said order is transmitted and received using a messaging protocol;
receiving by said user terminal, or by a user card associated with a user terminal, trader billing information representative of said trader from said trader terminal via said link,
processing on said user terminal or said user card said trader billing information and user information representative of said user,
transmitting said trader billing information and said user information to a service provider over a communications network, and
automatically transferring funds of said user to said trader via said service provider under the authorization of said user to effect a financial transaction

PC-AU 97/0054 8

RECEIVED 16 MAR 1998

27

between said user and said trader.

37. A method according to claim 36 wherein the step of transmitting an order includes automatically transmitting said order when said user terminal is within the proximity of said trader terminal.

5 38. A method according to claim 36 or claim 37 wherein the receiving step includes receiving said trader billing information through said local communications link when said user terminal or said user card is in the vicinity of said trader terminal.

10 39. A method according to claim 36 or claim 37 wherein the receiving step includes receiving said trader billing information through said local communications link when said user terminal or said user card is linked to said trader terminal.

40. A method according to any one of the previous claims wherein said financial transaction is authorised by said user upon entry of a PIN on said user terminal.

15 41. A method according to any one of the previous claims wherein prior to said transferring step, the method includes the step of the user confirming said order using said user terminal.

20 42. A method according to any one of claims 36 to 41 wherein the step of transferring funds includes transferring reserve funds of said user, said reserve funds being transferred either partially or in full according to certain criteria relating to goods and/or services purchased by said user.

43. A method according to any one of claims 36 to 42 further including the step of transmitting delivery destination information for goods and/or services purchased by said user to said service provider, together with said trader billing information

RECEIVED 16 MAR 1998

28

and said user information.

44. A method according to any one of claims 36 to 43 further including the step of transmitting information identifying said goods and/or services purchased by said user and transmitting said delivery destination information to an electronic warehouse, or the like.
- 5
45. A method according to claim 44 further including the step of allocating said goods and/or services on the basis of said information identifying said goods and/or services purchased by said user, and initiating delivery of said goods and/or services on the basis of said delivery destination information for collection by said user.
- 10 46. A method according to claim 45 wherein the step of transferring funds, including reserve funds, follows the completion of delivery or acceptance by said user of said goods and/or services.
47. A method according to any one of claims 36 to 46 wherein the step of receiving is performed by data acquisition means, such as detector means, which is either integrated into said user terminal or integrated in a user card, said user card adapted to be inserted into and received by said user terminal.
- 15
48. A method according to any one of claims 36 to 47 wherein the step of processing is carried out by said user terminal or said user card, the user card having computing processor means for carrying out said processing.
- 20 49. A method according to claim 47 or claim 48 further including the step of reading, through reader means, any one or all of said trader billing information, said user information and delivery destination information.
50. A method according to any one of claims 36 to 49 further including the step

PCTA 97 / 00548

RECEIVED 16 MAR 1998

29

of informing, through said user terminal, said user of all processes being conducted in respect of said business transaction.

51. A method according to any one of claims 36 to 50 including the step of reversing said business transaction in the event that goods and/or services purchased
5 by said user fail to meet certain criteria, such as quality control, said reversing of said transaction being initiated by said trader and including a partial or full refund to said user.
52. A method according to claim 51 and where said goods and/or services have associated taxes/imposts applied by a legislative body, the step of transferring funds
10 of said user including transferring to said legislative body a partial or full amount of said taxes/imposts.
53. A method according to claim 51 and where said goods and/or services have associated taxes/imposts applied by a legislative body and a dollar amount equivalent to said taxes/imposts has been transferred to said legislative body, in a
15 reversible transaction further including the step of transferring a partial or full amount of said dollar amount to said user.
54. A method according to any one of claims 36 to 53 further including the steps of transmitting confirmation messages of completion of all or part of said financial transaction to said trader and said user.
- 20 55. A method according to any one of claims 43 to 54 further including the steps of transmitting confirmation messages to said trader and said user of delivery of said goods and/or services.
56. A method according to any of claims 36 to 55 further including the steps of allowing said trader access to an account of said trader, through said service

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PCT/AU 97/00548
RECEIVED 16 MARCH 1998

30

provider, so as to verify transaction details in said account of said trader.

PCT 97/00548

RECEIVED 16 MAR 1992

31

ABSTRACT

A method and system for automatically conducting a business transaction between a user and a trader, including the functions of ordering, financial transaction, delivery initiation and data management. A trader terminal (170) includes billing information (200) representative of the trader and a user terminal (100) or user card (800) is used to receive and process the billing information (200) over a local communications link (300). The user terminal (100) or user card (800) includes user information representative of the user. The user information and billing information is transmitted by the user terminal (100) to a service provider (500) over a communications network (400) whereupon the service provider (500) automatically transfers funds of the user, which may be reserved funds, to the trader upon entry of a PIN by the user on the user terminal (100). Delivery destination information and information identifying the goods and/or services purchased by the user may be transmitted to the service provider (500) and to an electronic warehouse (900).

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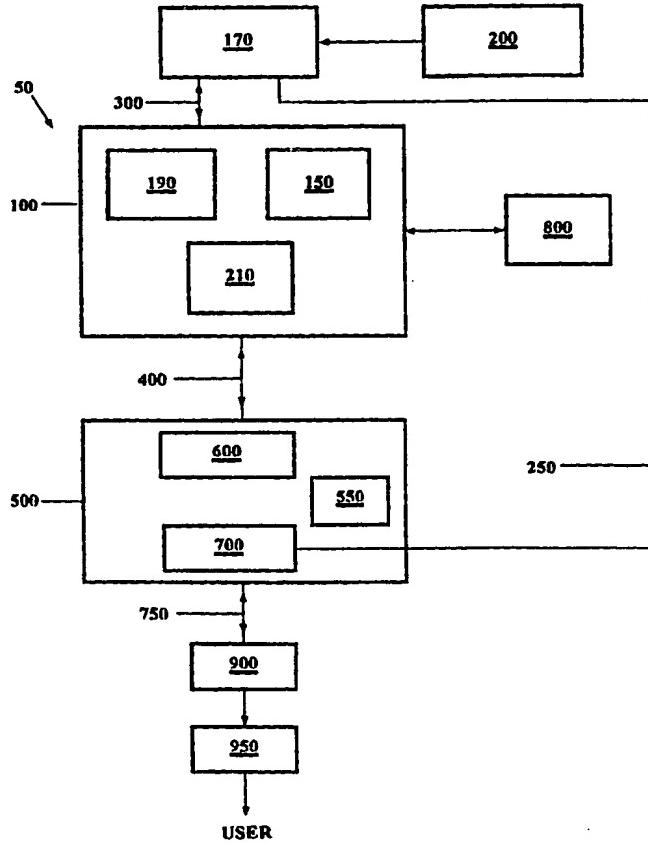
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(54) Title: AUTOMATIC ELECTRONIC FUNDS TRANSFER SYSTEM AND METHOD

(57) Abstract

A method and system for automatically conducting a financial transaction between a user and a trader. A trader terminal (170) includes billing information (200) representative of the trader and a user terminal (100) or user card (800) is used to receive and process the billing information (200) over a local communications link (300). The user terminal (100) or user card (800) includes user information representative of the user. The user information and billing information is transmitted by the user terminal (100) to a service provider (500) over a communications network (400) whereupon the service provider (500) automatically transfers funds of the user, which may be reserved funds, to the trader upon entry of a PIN by the user on the user terminal (100). Delivery destination information and information identifying the goods and/or services purchased by the user may be transmitted to the service provider (500) and to an electronic warehouse (900).





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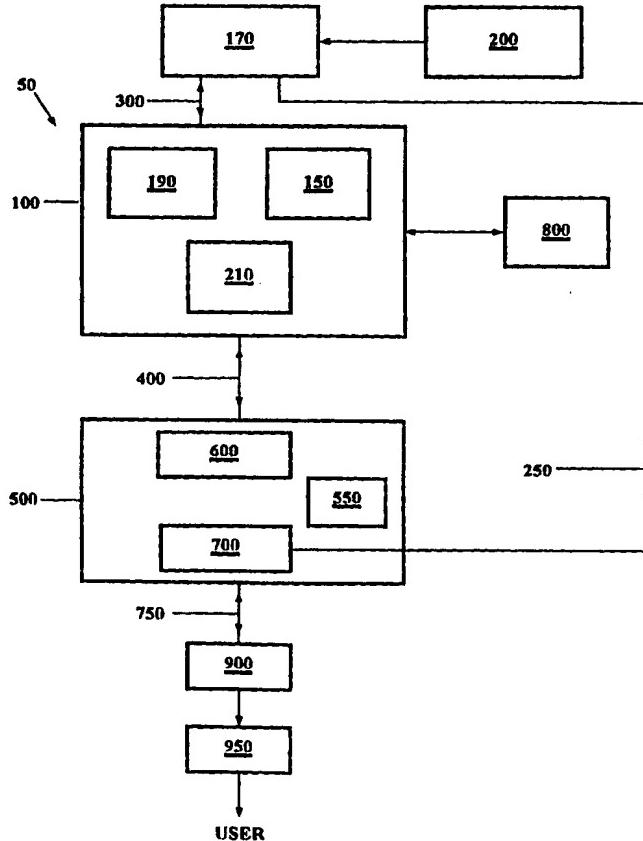
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| (21) International Application Number: | PCT/AU97/00548 | (81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). |
| (22) International Filing Date: | 27 August 1997 (27.08.97) | |
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| PO 2011 | 29 August 1996 (29.08.96) | AU |
| (71) Applicant (for all designated States except US): | XCELLINK CORPORATION [TC/HK]; 16th floor Suites 1-3, Kinwick Centre, 32 Hollywood Road, Central, Hong-Kong (HK). | |
| (72) Inventors; and | | Published |
| (75) Inventors/Applicants (for US only): | ADCOCK, John, Warwick [NZ/AU]; 11 Vicars Street, Hawthorn, VIC 3122 (AU). REYNOLDS, Rodney, Alfred, John [GB/AU]; 65 Wellington Street, Kew, VIC 3101 (AU). | With international search report. |
| (74) Agent: | CARTER SMITH & BEADLE; Qantas House, 2 Railway Parade, Camberwell, VIC 3124 (AU). | |

(54) Title: AUTOMATIC ELECTRONIC FUNDS TRANSFER SYSTEM AND METHOD

(57) Abstract

A method and system for automatically conducting a financial transaction between a user and a trader. A trader terminal (170) includes billing information (200) representative of the trader and a user terminal (100) or user card (800) is used to receive and process the billing information (200) over a local communications link (300). The user terminal (100) or user card (800) includes user information representative of the user. The user information and billing information is transmitted by the user terminal (100) to a service provider (500) over a communications network (400) whereupon the service provider (500) automatically transfers funds of the user, which may be reserved funds, to the trader upon entry of a PIN by the user on the user terminal (100). Delivery destination information and information identifying the goods and/or services purchased by the user may be transmitted to the service provider (500) and to an electronic warehouse (900).



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| DK | Denmark | LR | Liberia | SG | Singapore | | |
| EE | Estonia | | | | | | |

INTERNATIONAL SEARCH REPORT

International Application No.
PCT/AU 97/00548

| A. CLASSIFICATION OF SUBJECT MATTER | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|--|--|-----|---|-----|--|-----|--|-----|---|-----|--|-----|--|-----|---|-----|--|--|--|
| Int Cl ⁶ : G07F 19/00, 7/12; G06F 17/60 | | | | | | | | | | | | | | | | | | | | | | |
| According to International Patent Classification (IPC) or to both national classification and IPC | | | | | | | | | | | | | | | | | | | | | | |
| B. FIELDS SEARCHED | | | | | | | | | | | | | | | | | | | | | | |
| Minimum documentation searched (classification system followed by classification symbols) G07F 19/00, 7/08, 7/10, 7/12; G06F 17/60, 157:00, 15/21, 15/30 | | | | | | | | | | | | | | | | | | | | | | |
| Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched | | | | | | | | | | | | | | | | | | | | | | |
| Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) WPAT | | | | | | | | | | | | | | | | | | | | | | |
| C. DOCUMENTS CONSIDERED TO BE RELEVANT | | | | | | | | | | | | | | | | | | | | | | |
| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. | | | | | | | | | | | | | | | | | | | | |
| X | US 5526409 A (CONROW et al.) 11 June 1996 whole document | 1-52 | | | | | | | | | | | | | | | | | | | | |
| X | US 4858121 A (BARBER et al.) 15 August 1989 whole document | 1-52 | | | | | | | | | | | | | | | | | | | | |
| X | US 4678895 A (TATEISI et al.) 7 July 1987 whole document | 1-52 | | | | | | | | | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C | | <input checked="" type="checkbox"/> See patent family annex | | | | | | | | | | | | | | | | | | | | |
| <p>* Special categories of cited documents:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">"A"</td> <td style="width: 15%;">document defining the general state of the art which is not considered to be of particular relevance</td> <td style="width: 15%;">"T"</td> <td>later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</td> </tr> <tr> <td>"E"</td> <td>earlier document but published on or after the international filing date</td> <td>"X"</td> <td>document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</td> </tr> <tr> <td>"L"</td> <td>document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</td> <td>"Y"</td> <td>document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</td> </tr> <tr> <td>"O"</td> <td>document referring to an oral disclosure, use, exhibition or other means</td> <td>"&"</td> <td>document member of the same patent family</td> </tr> <tr> <td>"P"</td> <td>document published prior to the international filing date but later than the priority date claimed</td> <td></td> <td></td> </tr> </table> | | | "A" | document defining the general state of the art which is not considered to be of particular relevance | "T" | later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention | "E" | earlier document but published on or after the international filing date | "X" | document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone | "L" | document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) | "Y" | document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art | "O" | document referring to an oral disclosure, use, exhibition or other means | "&" | document member of the same patent family | "P" | document published prior to the international filing date but later than the priority date claimed | | |
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| "E" | earlier document but published on or after the international filing date | "X" | document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone | | | | | | | | | | | | | | | | | | | |
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| "P" | document published prior to the international filing date but later than the priority date claimed | | | | | | | | | | | | | | | | | | | | | |
| Date of the actual completion of the international search 7 November 1997 | Date of mailing of the international search report 14 NOV 1997 | | | | | | | | | | | | | | | | | | | | | |
| Name and mailing address of the ISA/AU AUSTRALIAN INDUSTRIAL PROPERTY ORGANISATION PO BOX 200 WODEN ACT 2606 AUSTRALIA Facsimile No.: (02) 6285 3929 | Authorized officer R STOPFORD Telephone No.: (02) 6283 2177 | | | | | | | | | | | | | | | | | | | | | |

INTERNATIONAL SEARCH REPORTInternational Application No.
PCT/AU 97/00548

| C (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT | | |
|---|---|------------------------------|
| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
| X | US 4302810 A (BOURICIUS et al.) 24 November 1981 whole document | 1-52 |
| X ✓ | EP 527639 A2 (US ORDER INC) 17 February 1993 whole document | 1-52 |
| X ✓ | WO 96/04618 A1 (T S HUGHES) 15 February 1996 whole document | 1-52 |
| X ✓ | WO 95/20195 A1 (DYNAMIC DATA SYSTEMS PTY LTD) 27 July 1995 whole document | 1-52 |
| X | US 4926325 A (BENTON et al.) 15 May 1990 whole document | 1-52 |
| X ✓ | GB 2188180 A (EFT-POS UK LIMITED) 23 September 1987 whole document | 1-52 |
| X | US 4562340 A (TATEISI et al.) 31 December 1985 whole document | 1-52 |

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No.

PCT/AU 97/00548

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

| Patent Document Cited in Search Report | | | Patent Family Member | | | | |
|--|---------|------|----------------------|----|----------|----|---------|
| US | 5526409 | AU | 80857/94 | BR | 9407899 | WO | 9512269 |
| US | 4858121 | NONE | | | | | |
| US | 4678895 | EP | 107865 | JP | 59079375 | | |
| US | 4562340 | EP | 106361 | JP | 59072572 | | |
| US | 4302810 | AU | 64100/80 | BR | 8008516 | CA | 1147863 |
| | | EP | 32193 | ES | 498164 | ES | 8202168 |
| | | JP | 56123589 | | | | |
| GB | 2188180 | NONE | | | | | |
| EP | 527639 | AU | 12642/92 | CA | 2054836 | WO | 9304435 |
| WO | 9604618 | AU | 33658/95 | | | | |
| WO | 9520195 | AU | 66417/94 | CA | 2181999 | CN | 1142871 |
| | | EP | 741884 | NZ | 265896 | | |
| US | 4926325 | NONE | | | | | |

END OF ANNEX

PATENT COOPERATION TRAJECTORY
PCT
INTERNATIONAL PRELIMINARY EXAMINATION REPORT

PE
13 APR 1998

PCT

(PCT Article 36 and Rule 70)

| | | |
|--|---|--|
| Applicant's or agent's file reference 26212 | FOR FURTHER ACTION | See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416). |
| International application No. PCT/AU 97/00548 | International filing date 27 August 1997 | Priority Date 29 August 1996 |
| International Patent Classification (IPC) or national classification and IPC Int. Cl.⁶ G07F 19/00, 7/12; G06F 17/60 | | |
| <p>Applicant (1) XCELLINK CORPORATION (2) ADCOCK, John Warwick et al</p> | | |

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
 2. This REPORT consists of a total of **seven** sheets, including this cover sheet.
- This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of **22** sheet(s).

3. This report contains indications relating to the following items:

- I Basis of the report
- II Priority
- III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV Lack of unity of invention
- V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI Certain documents cited
- VII Certain defects in the international application
- VIII Certain observations on the international application

| | |
|--|---|
| Date of submission of the demand 5 December 1997 | Date of completion of the report 20 March 1998 |
| Name and mailing address of the IPEA/AU IP AUSTRALIA PO BOX 200 WODEN ACT 2606 AUSTRALIA Facsimile No. (02) 6285 3929 | Authorized Officer R STOPFORD Telephone No. (02) 6283 2177 |

I. Basis of the report

1. This report has been drawn on the basis of (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.*):

- the international application as originally filed.
- the description, pages 1, 2, 8-10, 12-17, 19, 20, as originally filed,
pages , filed with the demand,
pages , filed with the letter of ,
pages 3, 4, 5, 6, 7, 7A, 7B, 11, 11A, 18, 18A, 31, filed with the letter of
16 March 1998.
- the claims, Nos. , as originally filed,
Nos. , as amended under Article 19,
Nos. , filed with the demand,
Nos. , filed with the letter of ,
Nos. 1-56, filed with the letter of **16 March 1998**.
- the drawings, sheets/fig 1-4, as originally filed,
sheets/fig , filed with the demand,
sheets/fig , filed with the letter of ,
sheets/fig , filed with the letter of .

2. The amendments have resulted in the cancellation of:

- the description, pages
- the claims, Nos.
- the drawings, sheets/fig

3. This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

4. Additional observations, if necessary:

IV. Lack of unity of invention

1. In response to the invitation to restrict or pay additional fees the applicant has:
- restricted the claims.
 paid additional fees.
 paid additional fees under protest.
 neither restricted nor paid additional fees.
2. This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is
- complied with.
 not complied with for the following reasons:
4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:
- all parts.
 the parts relating to claims Nos.

an overall system that communicates and automatically manages all the information needed for a complete business transaction cycle. The cycle includes the initiation of a business transaction by a user, transfer of funds from a user's account to a trader's account, management of electronic warehousing, initiation of the delivery 5 of the goods and/or services purchased by the user, and other activities that can be achieved automatically once the information is available in electronic form. An alternative to transferring funds within the initiation of the business transaction is to reserve funds for transfer from the user to the trader on a timed basis, or in installments or upon acceptance of delivery of the goods and/or services by the 10 user.

Accordingly, the present invention provides a system for automatically conducting a financial transaction between a user and a trader including:

a trader terminal including billing information representative of said trader:

a user terminal, or user card associated with a user terminal for receiving and 15 processing user information representative of said user and said billing information; a local communications link providing communication between said user terminal and said trader terminal, and a communications network enabling said user terminal to communicate with a service provider, wherein said user terminal or said user card receives said billing information from said trader terminal; said user terminal 20 transmits said billing information and said user information to said service provider over said communications network, whereupon said service provider automatically transfers funds of said user to said trader under the authorization of said user to effect a financial transaction between said user and said trader.

The user terminal or user card may receive said billing information through said 25 local communication's link when said user terminal or said user card is in the vicinity of said trader terminal or is linked to said trader terminal.

Reserve funds of said user may be made available to transfer to said trader either partially or in full for goods and/or services purchased by said user. The reserve funds may be transferred on the basis of the amount of use or length of use of the goods and/or services.

- 5 The user terminal may transmit delivery point information associated with goods and/or services purchased by the user through the financial transaction to the service provider together with said billing information and said user information.

The user information may be pre-stored on said user card or integrated into said user terminal. The user card may be adapted to be inserted into said user terminal.

- 10 The delivery point information may be pre-stored on said user card, integrated into the user terminal, or added by the user by means of a keyboard/keypad on request by an indicator on said user terminal.

- The user terminal may include a communications terminal adapted to interact with the trader terminal through data acquisition means such as detector means, of said 15 user terminal for sensing the trader billing information and a computing processor integrated with the communications terminal.

The user may authorise a transaction by entry of a PIN on the user terminal.

- On completion of the transfer of funds from the user to the trader, information identifying the goods and/or services of the trader purchased by the user and said 20 delivery point information may be automatically transferred to an electronic warehouse, or the like, to allocate the goods and/or services. Alternatively, the reserve funds of said user may be transferred to said trader upon acceptance by said user of delivery of said goods and/or services.

- After allocation of the goods and/or services has taken place, delivery of the goods 25 and/or services may be initiated, on the basis of said delivery point information.

Where implemented, reserve funds of said user may be transferred to said trader upon delivery or acceptance by said user of the goods and/or services.

The present invention also provides for a method of automatically conducting a financial transaction between a user and a trader, said method comprising the steps

5 of:

- receiving by a user terminal, or by a user card associated with a user terminal, trader billing information from a trader terminal;

- providing communication between said user terminal and said trader terminal via a local communications link;

10 - processing on said user terminal or said user card said trader billing information and user information representative of said user,

- transmitting said trader billing information and said user information to a service provider over a communications network, and

15 - automatically transferring funds of said user to said trader via the service provider under the authorization of said user to effect a financial transaction between said user and said trader.

The receiving step may include receiving said trader billing information through said local communications link when said user terminal or said user card is in the vicinity of said trader terminal or is linked to said trader terminal.

20 The step of automatically transferring funds may include transferring reserve funds either partially or in full for goods and/or services purchased by the user. The reserve funds may be transferred on the basis of amount of use or length of use of the goods and/or services or upon delivery or acceptance by the user of the goods

and/or services.

The method may further include the step of transmitting delivery point information associated with goods and/or services purchased by the user through the financial transaction to the service provider together with said trader billing information and
5 said user information.

The method may further include the step of automatically transmitting information identifying the goods or services of the trader purchased by the user and the delivery point information to an electronic warehouse, or the like, so as to allocate the goods or services.

- 10 The method may include a further step of initiating delivery of the goods or services on the basis of said delivery point information.

Preferably, the user authorises the financial transaction by entry of a PIN on the user terminal.

- 15 A preferred embodiment of the invention is hereinafter described, by way of example only, with reference to the accompanying drawings wherein:

Figure 1 shows a system for automatically conducting a financial transaction between a user and a trader in accordance with the present invention;

Figure 2 shows processes involved according to a first embodiment of the system of Figure 1;

- 20 Figure 3 shows processes involved according to a second embodiment of the system of Figure 1; and

Figure 4 shows processes involved according to a third embodiment of the system

of Figure 1.

- Figure 1 shows a system 50 that comprises a user terminal 100 in communication with a trader terminal 170 through local communication link 300. The trader's billing information 200 is stored at the trader terminal 170. To implement a transaction on a user's behalf, the user terminal 100 senses information identifying a trader, contained in billing information 200, and into which account of the trader funds will be transferred, retrieves information identifying the user's account 600 from which funds will be withdrawn, and forwards both sets of information to a service provider 500 over the communications network 400 whereby funds are transferred from the user account 600 to the trader account 700. The transfer of funds is approved by the user on entry of a PIN on the user terminal 100. The user terminal 100 may be used to add other information, such as delivery point information specifying the point of delivery for the goods and/or services purchased from the trader by the user.
- The delivery point information is then transmitted over communications network 400 to the service provider 500. On completion of the financial transaction, the delivery point information is then transmitted by service provider 500 to an electronic warehouse 900, or the like, over communications link 750. Information from the trader terminal 170, specifying the goods and/or services purchased by the user is forwarded at any time during the process to the electronic warehouse 900 which then reads that information to allocate or obtain the goods or services ready for delivery to the user at 950.

Funds of a customer may be reserved for payment to a trader so that the transfer of funds need not take place immediately following the completion of the transaction. Funds may be transferred from the user account 600 to the trader account 700 progressively with time or upon the completion of an event. The funds could be transferred partially, by way of installments, or fully. Each installment may be under the control of the trader billing information 200. For example a

information and trader account details. The data acquisition system 190 may alternatively be an ultrasonic detector, radio frequency detector or magneto-inductive detector depending on the communications used in the local link 300.

The communications link 300 is the means by which the user's telephone of the 5 user terminal 100 is provided with the identity of the trader, the identity of the trader's banking account to which payment is effected and sufficient data related to the trader's billing system to include the dollar amount of the goods and/or services and what the goods and/or services relate to, together with other information which may be necessary for the conduct of the transaction. The local link 300 is duplex 10 in that it allows two-way communication on different channels. On one channel, the trader's data will be transmitted to the user's phone and the reverse channel is used for confirmation to the trader that a transaction has been completed and for other handshaking protocols. The duplex communications link may be any one of several types of link including, but not limited to, modulated infra-red, magneto-inductive loop, modulated ultrasonic and radio frequency in each direction, or in 15 any combination. The detector 190 located in the user terminal 100 will accordingly be of a type corresponding to the data transmission type and methodology used on the local link 300.

Once the trader's details have been received by the user terminal 100, details of the 20 user's account from which funds will be withdrawn are read from the card 800 of the user by the card reader 150. Information detailing the delivery point of the goods or services purchased may be entered by the user through terminal 100 for transmission to the service provider 500.

The user's phone subsequently calls or dials automatically the service provider 500, 25 such as a banking system, over the communications network 400 whereby a conventional EFTPOS link is established. The service provider 500 has access to each of the user's account 600 and the trader's account 700. The user is informed of the processes being conducted by data appearing on the display facility of the

required to determine all the billing information to complete the transaction.

Alternatively, a trader's card, containing the billing information and located at each terminal, may be sensed by either detector 190 or card reader 150 of user terminal 100 at various points along the motorway etc. to complete the transaction.

- 5 A second example of how system 50 may be implemented is discussed with reference to Figure 3. In a similar fashion to the previous example, goods or services of a trader may be advertised on a pay-television channel in an interactive pay-television application. The set-top unit (STU) associated with a user's subscription, or alternatively coded information appearing on the TV screen, may
10 be used to provide the trader billing information including account and identification details.

In the case of the STU, various codes associated with each trader may be pre-programmed into the STU. A user terminal 100, akin to a remote control unit, has a detector 190 for sensing and receiving the trader billing information. When a
15 user wishes to purchase goods or services advertised at step 310, the user terminal 100 is directed to sense the information from the trader over a local link 300 at step 312 and the trader billing information is stored in the user terminal 100, where user information is also stored. The cost of the product is displayed on terminal 100 or on the user's television screen at step 314. At step 316, the information relating to
20 trader billing and to the user is processed and then at step 318 transmitted through an interface 210 on the terminal 100, over link 400 to a service provider 500. Alternatively, a user card 800 may store and process the trader information and user information, have it read by card reader 150 and subsequently automatically transmitted to the service provider. At step 320, the service provider 500 retrieves
25 the trader account details 700 and user account details 600. At step 324 the service provider 500 verifies that the user account has enough funds to cover the transaction, then at step 326 the transaction details are displayed for the user to authorise the transaction by entry of a PIN at step 328. The funds are then

CLAIMS:

1. A system for automatically conducting a financial transaction between a user and a trader including:

a trader terminal including billing information representative of said trader;

5 a user terminal or a user card associated with a user terminal, for receiving and processing user information representative of said user and said billing information, a local communications link providing communication between said user terminal and said trader terminal, and a communications network enabling said user terminal to communicate with a service provider, wherein said user terminal or said user card receives said billing information from said trader terminal said user terminal transmits said billing information and said user information to said service provider over said communications network, whereupon said service provider automatically transfers funds of said user to said trader under the authorization of said user to effect a financial transaction between said user and said trader.

10 2. A system according to claim 1 wherein said user terminal or said user card receives said billing information from said trader terminal through said local communications link when said user terminal or said user card is in the vicinity of said trader terminal.

20 3. A system according to claim 1 wherein said user terminal or said user card receives said billing information from said trader terminal through said local communications link when said user terminal or said user card is linked to said trader terminal.

25 4. A system according to any previous claim wherein said financial transaction is authorised by said user upon entry of a PIN on said user terminal.

5. A system according to any previous claim wherein funds of said user are reserved for transfer to said trader, the reserved funds being transferred either

partially or in full according to certain criteria relating to goods and/or services purchased by said user.

6. A system according to claim 5 wherein said certain criteria includes any one of amount of use of said goods and/or services, duration of use of said goods and/or
5 services.

7. A system according to claim 5 or claim 6 wherein the partial transfer of reserved funds are transferred in installments and the amount of each installment is controlled in accordance with said billing information.

8. A system according to any previous claim wherein delivery destination
10 information for goods and/or services purchased by said user is transmitted to said service provider, together with said billing information and said user information.

9. A system according to claim 8 wherein, information identifying said goods and/or services purchased by said user are transmitted, together with said delivery destination information, to an electronic warehouse, or the like.

15 10. A system according to claim 9 wherein said electronic warehouse allocates said goods and/or services on the basis of said information identifying said goods and/or services purchased by said user, and initiates delivery of said goods and/or services on the basis of said delivery destination information for collection by said user.

20 11. A system according to claim 10 wherein the transfer of funds, including reserved funds, of said user to said trader takes place upon completion of delivery, or acceptance by said user, of said goods and/or services.

12. A system according to any previous claim wherein said billing information is incorporated into a trader card at said trader terminal.

13. A system according to any previous claim wherein said user terminal has data acquisition means, such as detector means, for sensing and receiving said trader billing information at said trader terminal.
14. A system according to any previous claim wherein said user terminal stores 5 said user information, said user information including user identification and an account of said user from which funds are transferred.
15. A system according to claim 14 wherein said user terminal has computing processor means for processing said billing information and said user information.
16. A system according to any one of claims 8 to 15 wherein said user terminal 10 stores said delivery destination information, or said delivery destination information is input by said user when prompted by said user terminal.
17. A system according to any previous claim wherein said user terminal has interface means adapted to transmit any or all of said billing information, said user information, information identifying goods and/or services purchased by said user 15 and delivery destination information to said service provider over said communications network.
18. A system according to any one of claims 10 to 17 wherein confirmation messages of completion of the transaction are transmitted by said service provider and confirmation of delivery of goods and/or services is transmitted by said 20 electronic warehouse, to said trader and said user.
19. A system according to any previous claim wherein said user terminal is adapted to receive said user card, said user card being unique to a particular user.
20. A system according to claim 19 wherein said user card pre-stores said user information, said user information including user identification and an account of

said user from which funds are transferred.

21. A system according to claim 19 or claim 20 wherein said user card has data acquisition means incorporated therein, such as detector means, for sensing and receiving said billing information at said trader terminal.

5 22. A system according to any one of claims 19 to 21 wherein said user card has computing processor means for processing said billing information and said user information.

23. A system according to any of claims 19 to 22 wherein said user card pre-stores delivery destination information.

10 24. A system according to claim 22 or claim 23 wherein said user terminal has reader means for reading any one or all of said billing information, said user information and delivery destination information.

15 25. A system according to any previous claim wherein the user is informed, through the user terminal, of all processes being conducted in respect of the financial transaction.

26. A system according to any previous claim wherein said transaction is reversible such that a partial or full refund to the user from the trader for said goods and/or services takes place and is initiated by said trader on the basis of certain criteria, such as quality control.

20 27. A system according to claim 26 wherein said transaction is reversed by accessing a database of said service provider through a communications system operating between said trader and said service provider.

28. A system according to claim 27 wherein said database stores information

relating to each transaction by an identification code.

29. A system according to any previous claim wherein said trader has access to an account of said trader into which funds are transferred, through said service provider, so as to verify transaction details in said account of said trader.

5 30. A system according to any previous claim wherein said user terminal has access to an account of said user to verify that sufficient funds are available for said transaction.

10 31. A system according to any previous claim including goods and/or services having associated taxes/imposts applied by a legislative body, wherein the transfer of funds of said user includes said service provider transferring the associated amount of taxes/imposts to the legislative body.

15 32. A system according to any one of claims 26 to 28 including goods and/or services have associated taxes/imposts applied by a legislative body, and in a reversible transaction, wherein the amount of taxes/imposts previously transferred to the legislative body is transferred to said user.

33. A system according to any previous claim wherein the user terminal is incorporated in said trader terminal and said user information is incorporated in either said user terminal or said user card.

20 34. A method of automatically conducting a financial transaction between a user and a trader, said method comprising the steps of:

receiving by a user terminal, or by a user card associated with a user terminal, trader billing information from a trader terminal, providing communication between said user terminal and said trader terminal, via a local communications link,

25 processing on said user terminal or said user card said trader billing

information and user information representative of said user,

transmitting said trader billing information and said user information to a service provider over a communications network, and

5 automatically transferring funds of said user to said trader via said service provider under the authorization of said user to effect a financial transaction between said user and said trader.

35. A method according to claim 34 wherein the receiving step includes receiving said trader billing information through said local communications link when said user terminal or said user card is in the vicinity of said trader terminal.

10 36. A method according to claim 34 wherein the receiving step includes receiving said trader billing information through said local communications link when said user terminal or said user card is linked to said trader terminal.

37. A method according to any one of claims 34 to 36 wherein said financial transaction is authorised by said user upon entry of a PIN on said user terminal.

15 38. A method according to any one of claims 34 to 37 wherein the step of transferring funds includes transferring reserve funds of said user, said reserve funds being transferred either partially or in full according to certain criteria relating to goods and/or services purchased by said user.

20 39. A method according to any one of claims 34 to 38 further including the step of transmitting delivery destination information for goods and/or services purchased by said user to said service provider, together with said trader billing information and said user information.

25 40. A method according to any one of claims 34 to 39 further including the step of transmitting information identifying said goods and/or services purchased by said user and transmitting said delivery destination information to an electronic

warehouse, or the like.

41. A method according to claim 40 further including the step of allocating said goods and/or services on the basis of said information identifying said goods and/or services purchased by said user, and initiating delivery of said goods and/or services
5 on the basis of said delivery destination information for collection by said user.
42. A method according to claim 41 wherein the step of transferring funds, including reserve funds, follows the completion of delivery or acceptance by said user of said goods and/or services.
43. A method according to any one of claims 34 to 42 wherein the step of
10 receiving is performed by data acquisition means, such as detector means, which is either integrated into said user terminal or integrated in a user card, said user card adapted to be inserted into and received by said user terminal.
44. A method according to any one of claims 34 to 43 wherein the step of processing is carried out by said user terminal or said user card, the user card
15 having computing processor means for carrying out said processing.
45. A method according to claim 43 or claim 44 further including the step of reading, through reader means, any one or all of said trader billing information, said user information and delivery destination information.
46. A method according to any one of claims 34 to 45 further including the step
20 of informing, through said user terminal, said user of all processes being conducted in respect of said financial transaction.
47. A method according to any one of claims 34 to 46 including the step of reversing said financial transaction in the event that goods and/or services purchased by said user fail to meet certain criteria, such as quality control, said reversing of

said transaction being initiated by said trader and including a partial or full refund to said user.

48. A method according to claim 47 and where said goods and/or services have associated taxes/imposts applied by a legislative body, the step of transferring funds 5 of said user including transferring to said legislative body a partial or full amount of said taxes/imposts.

49. A method according to claim 47 and where said goods and/or services have associated taxes/imposts applied by a legislative body and a dollar amount equivalent to said taxes/imposts has been transferred to said legislative body, in a 10 reversible transaction further including the step of transferring a partial or full amount of said dollar amount to said user.

50. A method according to any one of claims 34 to 49 further including the steps of transmitting confirmation messages of completion of said financial transaction to said trader and said user.

15 51. A method according to any one of claims 39 to 50 further including the steps of transmitting confirmation messages to said trader and said user of delivery of said goods and/or services.

52. A method according to any of claims 34 to 51 further including the steps of allowing said trader access to an account of said trader, through said service 20 provider, so as to verify transaction details in said account of said trader.

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | |
|-------------------------------|-----------------------|-----------|
| Novelty (N) | Claims 1-56 Claims | YES NO |
| Inventive step (IS) | Claims 1-56 Claims | YES NO |
| Industrial applicability (IA) | Claims 1-56 Claims | YES NO |

2. Citations and explanations

US 5526409 A (CONROW et al) 11 June 1996

Whole document

ADAPTIVE COMMUNICATION SYSTEM WITHIN A TRANSACTION CARD NETWORK

Point-of-presence device installed in a merchant establishment as an interface between a retail information system and a transaction card authorisation network. By using a simple message data format between the retail information system and the device, the device insulates the retail information system from changes to local communication access methods and changes to point-of-sale compliance requirements initiated by the card processor. The device first establishes a dial-up telephone connection to the authorisation network and then interleaves both financial data messages and non-financial messages over the same telephone line to the authorisation network. The device provides authorisation response time that substantially equal response times provided by leased line connections to the authorisation network. In addition, the present invention provides improved diagnostic and draft capture capability for the retail information system.

US 4858121 A (BARBER et al) 15 August 1989

Whole document

MEDICAL PAYMENT SYSTEM

A plurality of remote terminals (A) are each disposed in a physician's office and are connected by telephone lines or other electronic data communication with a central processing system (10) and a magnetic tape reader (12) for entering physician, patient, medical service, insurance and other medically-related data. The entered data is processed by a terminal processor (20) to incorporate previously-stored data from an electronic data memory and to transfer and store entered medical transaction data to memory. The central processing system includes a physician file for storing participating physician identifications for verifying received physician information data, a patient memory for storing participating patient data, an insurance company file for storing appropriate format for medical claims for each of a plurality of participating insurance companies, and a claims file for storing a record of medical insurance claims processed. A central processing computer processes the received data and formats it into the appropriate format for a medical claims to the identified insurance company. A printer (D) or an electronic data transfer (C) transfers the medical claims from the central processing system directly to the insurance companies. Electronic funds transfer facilities at the central processing station and one or more banks or financial institutions are called upon to transfer funds directly to a physician's account and to acknowledge receipt of funds from insurance company accounts.

US 4678895 A (TATEISI et al) 7 July 1987

Whole document

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of : Box V

SYSTEM FOR MAKING PAYMENTS FOR TRANSACTIONS

A payment making system comprises an electronic cash register and a payment making terminal device connected to the register and is adapted for use with a bank card issued by a bank to a person having a deposit account with the bank. The bank card had recorded therein at least data relating to the account number of the holder of the card, data relating to the bank where the account is opened and data for identifying the holder. The case register comprises a keyboard for entering data relating to goods and including the prices of the goods and a first card reader for reading the data in the bank card and calculates the total sum to the prices entered as the sum payable. The terminal device is connected to the communicates with a control center provided with a file having stored therein data relating to the accounts of users and stores and with the function of transferring sums payable from users' account to stores' accounts. The terminal device comprises a first memory for storing paired data transferred from the cash register and including the bank card data and sums payable and a second card reader for reading the data recorded in the bank card. The paired data including the card data in match with the data read by the second card reader is retrieved from the first memory. The data relating at least to the account number of the user of the sum payable which are included in the paired data retrieved, and data prestored and relating to the store's account number are set to the control centre.

US 4302810 A (BOURICIUS et al) 24 November 1981

Whole document

METHOD AND APPARATUS FOR SECURE MESSAGE TRANSMISSION FOR USE IN ELECTRONIC FUNDS TRANSFER SYSTEMS

An electronic funds transfer system wherein it is required that a bank be reasonably guaranteed that the two parties to a retail transaction (ie a person and a retailer) agree on the transaction before the funds transfer takes place. The message including the transaction information is encrypted by the person using a unique encryption key (K_p) stored in a highly secure storage location in his data storage and transfer card (DSTC) and this first encrypted message is sent to the retailer who doubly encrypts the initially-received encrypted message from P under his own unique encryption key (K_R) and his doubly encrypted message is sent to the bank. The person also sends the transaction message to the retailer in clear, and the retailer first verifies the message and then, utilising his own encryption key (K_R), encrypts same and similarly sends it to the bank. The bank utilising unique retailer and customer identification data sent with the message, accesses a "key" file and first extracts the retailer's key (K_R) and decrypts a first portion of the message, extracts the person's key (K_p) and decrypts a second portion of the received message. The bank then compares a predetermined portion of the transaction message originating with the person with a similar portion received from the retailer and if identical, the appropriate funds transfer is made. If the messages do not agree, a predetermined default procedure is initiated.

EP 0527639 A2 (US ORDER INC) 17 February 1993

Whole document

HOME FINANCIAL TRANSACTION SYSTEM

A Home Financial Transaction System (HFT) is described comprising financial transaction terminals (FTT) with means to read symbolic representations of data which identify merchant/service provider, method of payment, amount of payment and type of transaction to be conducted. The FTT user scans an optical reader means (1) over the symbolic representation on a bill or invoice and stores the information relating to the amount to be paid, method to be paid and related information

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of : Box V (page 2)

in the memory (7) of the (FTT). Once all transactions have been stored, the terminal (FTT) communicates with a financial transaction computer system (FTCS) which assembles data from a plurality of terminals (FTT) for subsequent transmission to banks and other financial institutions for clearing house operations. Symbolic representations can be imprinted on bills or invoices or imprinted on separate data sheets which can be scanned by an optical scanning means to input the desired identification data. One enhancement also calls for transaction codes to be symbolically represented and input by the optical scanning means to conduct the desired transaction.

WO 96/04618 A1 (T S HUGHES) 15 February 1996

Whole document

SYSTEM FOR REMOTE PURCHASE PAYMENT AND REMOTE BILL PAYMENT TRANSACTIONS

A terminal is provided for allowing a user to conduct remote purchase payment and remote bill payment transactions with a remote host computer. In one embodiment, the terminal includes a QWERTY alphabetic keyboard (14), a magnetic card reader (54), a display (16), a printer (52), a modem (30), all integral to the terminal. A controller is included for operating the terminal and communicating with the remote host computer system via the modem, the controller coupled to the QWERTY alphabetic keyboard (14), the numeric keyboard (16), the magnetic card reader (54), the display (12), the printer and the modem (30). A memory is coupled to the controller for storing a transaction log of purchase payment transactions, each purchase payment transaction in the transaction log comprising a date and time of purchase payment transaction an amount of the purchase payment transaction, information identifying a merchant, information identifying an item or service purchased, and data for identifying the transaction.

WO 95/20195 A1 (DYNAMIC DATA SYSTEMS PTY LTD) 27 July 1995

Whole document

FUNDS TRANSACTION DEVICE

A funds transaction device (1) is provided for transferring funds between one bank account or credit facility and another bank account or credit facility. The device (1) has a card reader device (29); key pad device (17) with an encryption system; a modem device (35); a communication interface device (37) connected with the modem device (35); an output report device (13); a communication device (27); and a central processing device (33). The central processing device (CPU) (33) interconnects all of the devices (1 through 6). The communication device (27) is preferably a mobile telephone which can telephone a communications network to connect to a host EFTPOS type network connected with a bank or credit establishment. The CPU (33) is programmed to store account data of the owner/lease of the device and to read account data from a user's card (31) by passing said card (31) to said card reader device (29), and to store the account data and to activate said key-pad device (17) so a user can enter information via said key-pad device (17) such as, account type. Account transaction type, transaction amount, and a PIN number with all the user entered information being encrypted by said key-pad device. The CPU (33) then activates a communication connection via said modem device (35) and said interface device (37) to connect with the host EFTPOS device and transmit the stored user entered data as well as transmit the account data of the owner/lease of the device so that funds can be transferred from the user's bank account or credit or debit card to the owner lease's bank account or vice versa and to provide signals to the output report device (13) confirming the transaction or denial of the transaction or other information relating to the transaction.

US 4926325 A (BENTON et al) 15 May 1990

Whole document

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of : Box V (page 3)

APPARATUS FOR CARRYING OUT FINANCIAL TRANSACTIONS VIA A FACSIMILE MACHINE

Financial transactions between buyers and sellers are carried out using at least one facsimile machine improved in accordance with the invention both to transfer electronic funds data amount the buyer, seller and an authorising institution and to print transaction records. Each buyer and seller is provided with an identification module, which may be in the form of a card or a mechanical key containing an integrated circuit "chip" that is inserted into a receptacle provided in the facsimile machine. Each module stores data corresponding to an account number, transaction summaries, an account balance, signature and other information. The machine in turn contains circuitry to communicate bidirectionally with the identification module and, via telephone lines, with modules provided at other facsimile machines. In a "local" mode of operation, buyer and seller modules are placed into communication with each other at a single facsimile machine which authorises and carries out a requested transaction between the modules, and prints out a transaction record. In a "remote" mode of operation, modules at remote facsimile machines communicate with each other via telephone lines, with a transaction record being printed at each end. In an "upload" mode, transaction data accumulated at each machine is transmitted to the authorising institution.

GB 2188180 A (EFT-POS UK LIMITED) 23 September 1987

Whole document

EFT-POS TERMINAL APPARATUS

EFT-POS terminal apparatus is constructed in two parts with a tamper-resistant EFT-POS cardholder unit (ECH'J) communicating via a standard interface ;with a retailer's unit (RU) which provides the retailing operations and also provides the necessary communication to the EFT-POS network.

US 4562340 A (TATEISI et al) 31 December 1985

Whole document

TERMINAL DEVICE FOR MAKING PAYMENTS FOR CREDIT TRANSACTIONS

A terminal device for making payments for credit transactions is connected to and adapted to communicate with a control centre which includes a memory having stored therein data relating to a plurality of users of credit cards and to a deposit account of at least one credit company, the control centre having the function of transferring a specified sum payable from an account of each user to the account of the credit company. The terminal device comprises a card reader for reading data from either a credit card or a bank card, the credit card having recorded therein data relating at least to the account number of the credit company and data relating to the holder of the card, the bank card having recorded therein data relating at least to an account number of its holder and data for identifying the holder; input means for entering sum payable; a display for showing at least the entered sum payable; a unit for transmitting to the control centre at least the entered sum payable the data read by the card reader and relating to the account number of the credit company, such as the company code thereof, and the data read by the card reader and relating to the account number of the holder of the bank card; and a recorder for recording data as to transfer processing on receiving from the control centre a message indicating completion of the transfer processing.

None of the above citations disclose the user terminal transmitting the billing information and the user information to the service provider. Consequently the claims are seen as being novel, having an inventive step and being industrially applicable.